10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MTCH2 Antibody

Catalog # ASC10861

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q791V5
Other Accession	NP_055157, 5815347
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	33499
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	MTCH2 antibody can be used for detection of MTCH2 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	56428
Other Names	Mitochondrial carrier homolog 2, Mtch2
Target/Specificity	Mtch2;
Reconstitution & Storage	MTCH2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	MTCH2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Mtch2 {ECO:0000312|MGI:MGI:1929260}
Function	Protein insertase that mediates insertion of transmembrane proteins into the mitochondrial outer membrane. Catalyzes insertion of proteins with alpha-helical transmembrane regions, such as signal- anchored, tail-anchored and multi-pass membrane proteins. Does not mediate insertion of beta-barrel transmembrane proteins (By similarity). Also acts as a receptor for the truncated form of pro- apoptotic BH3-interacting domain death agonist (p15 BID) and has therefore a critical function in apoptosis (PubMed:20436477, PubMed:26219591, PubMed:26876167, PubMed:30510213). Regulates the quiescence/cycling of hematopoietic stem cells (HSCs) (PubMed:20436477, PubMed:26219591, PubMed:26876167). Acts as a regulator of mitochondrial

	fusion, essential for the naive-to-primed interconversion of embryonic stem cells (ESCs) (PubMed:30510213). Acts as a regulator of lipid homeostasis and has a regulatory role in adipocyte differentiation and biology (PubMed:26876167, PubMed:28127879).
Cellular Location	Mitochondrion outer membrane; Multi-pass membrane protein
Tissue Location	Expressed in a wide variety of tissues. Predominant expressed in liver, kidney, heart, skeletal muscle and testis

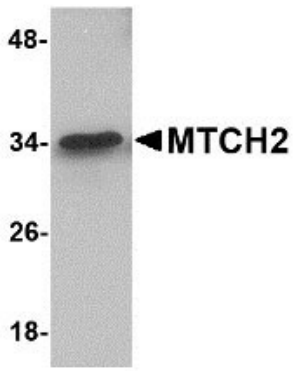
Background

MTCH2 Antibody: Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer. The Bcl-2 family of proteins is comprised of critical regulators of apoptosis that can be divided into two classes: those that inhibit apoptosis and those that promote cell death. MTCH2 is a member of the mitochondrial carrier protein family that catalyze the exchange of substrates across the inner mitochondrial membrane and is targeted by Bid, a pro-apoptotic Bcl-2 family member, in response to apoptotic signals, suggesting that MTCH2 may play a key role in the mitochondrial apoptosis pathway.

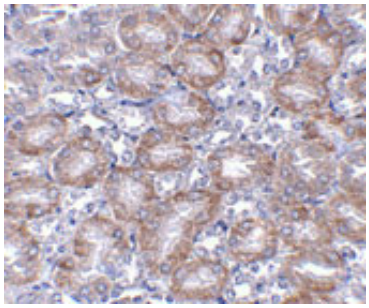
References

Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ.2000; 7:2-7.
Cory S, Huang DCS, and Adams JM. The Bcl-2 family: roles in cell survival and oncogenesis. Oncogene2003; 22:8590-607.
Heiser D, Labi V, Erlacher M, et al. The Bcl-2 protein family and its role in the development of neoplastic disease. Exp. Geron.2004; 39:1125-35.
Grinberg M, Schwarz M, Zaltsman Y, et al. Mitochondrial carrier homolog 2 is a target of tBID in cells signaled to die by tumor necrosis factor alpha. Mol. Cell. Biol.2005; 25:4579-90.

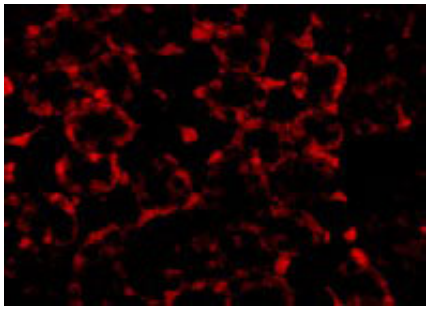
Images



Western blot analysis of MTCH2 in 293 cell lysate with MTCH2 antibody at 1 µg/mL.



Immunohistochemistry of MTCH2 in mouse kidney tissue with MTCH2 antibody at 5 µg/mL.



Immunofluorescence of MTCH2 in Mouse Kidney cells with MTCH2 antibody at 20 µg/mL.

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